



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,390	10/22/2001	Reiner Gross	GR 00 P 19937	9813

7590 03/11/2004

LERNER AND GREENBERG, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480

EXAMINER

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
----------	--------------

2832

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,390	GROSS, REINER	
	Examiner	Art Unit	
	Karl D Easthom	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2832

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "said other insulating layer" lacks antecedent basis so that it is not clear which insulating layer is being addressed.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Harper et al. or Portman. Harper discloses the claimed invention at Fig. 1 with resistance zone 12, leads 16a, insulating layer 14 and another insulating layer 10 surrounding said leads 16a and the resistance zone. Portman discloses the claimed invention at Fig. 2 with resistance zone 13, leads 19a, 19b, insulating layer 17 and another insulating layer 15 surrounding said leads 19a, 19b and the resistance zone 13.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2832

6. Claims 1, 3 and 5-9 are rejected under 35 U.S.C. 102(b) as anticipated by Smith, Jr. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith in view of Zandman. Smith discloses the claimed invention at Fig 8 with resistance zone 22, power supply leads 26', 27', connections 15, 20 or the bonding described (col. 4, lines 45-55), and insulating layer 54. The another insulating layer 51 surrounds the construction including the resistance zone 22 and the leads 26' and 27'. The resistor 22 is a metal film disclosed at col. 2, lines 1-20 55-70 as the metal film of Zandman, which is described as an alloy of nichrome at col. 2. As the 35 USC 103 alternative, it would have been obvious to use the same film where it is described as having advantages as noted such as a small temperature coefficient of resistivity at col. 1. In claim 3, the conductive layer is 52. In claim 5, the leads are of "coaxial design" where each lead is coaxial with the portions 56, 57. In claim 6, the leads are stacked when the device is on its side. In claim 7, the elements above apply, and the barrier is the air between 52 and 51 with ambient and the resistor adjacent parts producing heat or cold. Or in claim 7, the thin layer of TEFLON described at col. 4, lines 55-65 is the barrier. Thermal coupling exists inherently since the material 54 is not a perfect thermal insulator. In claims 8-9, the connections have dimension that correspond where the term is construed broadly without necessarily meaning equal. (For claim 8, the alternative 35 USC 103 rejection is not required where no alloy is claimed, but claim 8 is here grouped with claim 9 all other elements being similar or the same).

7. Claims 1, 6-7, and 9 are rejected under 35 U.S.C. 103(a) as obvious over Woodson in view of Wrob et al. Woodson discloses the claimed invention except the material of the resistor an alloy. Wrob at col. 2, lines 45-68, discloses heaters such as that of Woodson as alloys as typical in the trade, so well known as to have a trade designation NICRHOME, so that it would

Art Unit: 2832

have been obvious to employ the same for heating where Woodson discloses a similar wire heater. The remaining elements of claim 1 are at Woodson Fig. 1 with resistance zone 19, leads 14, 16, 23, insulating layer 13 and another insulating layer 11 surrounding said leads and the resistance zone. In claim 6, the leads are stacked as depicted as one over another. For claim 7, the protective barrier is air. In claim 9, all elements have dimensions and the same correspond where the latter is a broad term.

8. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Jr. in view of Mazochette. Smith discloses as noted above, the claimed invention, except *arguendo* for claim 5, the coaxial cable where same is more narrowly considered here, and except for claim 4, the intermeshed leads. The twisted pair disclosed at col. 3, line 18 is interpreted as intermeshed, where the term is construed broadly, and the coaxial cable is disclosed as 52 at Fig. 3, each useful as disclosed as connecting to a resistor, similar to the resistor of Smith, so that either of the standard connections would have been obvious in order to make a standard connection.

9. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Portmann or Smith, Jr. in view of Ogren. Portmann or Smith, Jr. disclose the invention as noted above except the alloy manganin. Ogren discloses the alloy manganin as a prior art resistor having good conductivity over a narrow temperature range (see col. 1), with other alloys having broader temperature ranges good for small compact resistors (see col. 2) such as that of Smith or as wires of Portmann, so that it would have been obvious to employ known alloys for resistors where metal films or wires are disclosed are but one type of metal alloys, with films being alloys, where the alloys can be employed depending on the temperature range of interest.

Art Unit: 2832

10. Applicant's arguments filed 1/15/04 have been fully considered but they are not persuasive in full. Applicant argues that McLaughlin does not disclose another insulating layer on an insulating layer. This is not claimed. The insulating layer 51 surrounds the leads 26' and 27 and the resistor body which is the claimed construction. Applicant states that only a minimal amount of the leads are accommodated by the insulating layer 51. Nonetheless, the leads are surrounded. Applicant's definition of surrounded is misapplied in that it only refers to the extent of being surrounded in the circumferential direction, not in the length direction of the leads as argued. For example, if two buildings are surrounded by a water moat, this does not mean the buildings must be submerged in the water to be surrounded, which would otherwise be required as the obvious extension of applicant's argument and applied definition.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is (272) 571-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (272) 571-1989. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KARL D. EASTHOM
PRIMARY EXAMINER